

RESULTS OF OPERATION ON THE KIDNEY FOR CALCULUS AND TUBERCULOSIS.*

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THE final outcome of operations is of wider interest than the immediate results. The object of the paper is to trace first the future life history of patients from whom in past years a tuberculous kidney had been removed. Definite figures as to the prognosis of these patients without operation were difficult to obtain. Easier to reach were the results which follow nephrectomy for this condition. In many cases decision as to the necessity for operation was very difficult. Most surgeons believe that functional restoration of the kidney which had once been the seat of tuberculosis was exceedingly rare. The writer believed, however, that under proper hygienic and climatic conditions it is possible, and related the history of such a case.

In his experience he had performed fifty-four nephrectomies, nineteen having been done for tuberculosis. There were no fatalities due to shock. Two patients died within a few weeks after operation. Eight patients died at periods of from one to three years after operation. Five patients have made a perfect recovery, and now enjoy excellent health at periods varying from six to nineteen years after operation. In three hundred and thirty cases of nephrectomy which he had collected there were about 20 per cent. of permanent cures.

Calculi.—He had performed forty-five operations for renal calculi. In this paper the septic kidneys, or those in a condition of pyonephrosis process were excluded from consideration. Fifteen nephrolithotomies had been performed by him. Twelve of these patients were perfectly well at the present time. It was a question with him whether the stone should be extracted through an incision in the parenchyma of the kidney or through one made in the renal pelvis. He had never been inconvenienced

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by excessive hemorrhage and he was inclined to prefer the extraction of the stone through the kidney, rather than by an incision in its pelvis.

While these cases are not sufficiently numerous to throw much light on this question, yet it is suggestive that in five patients where the incision was made in the pelvis, leakage occurred in four. In six patients where the incision was made through the kidney itself, leakage occurred in one only. It is not quite fair, however, to judge from these figures that leakage of urine is less apt to follow incisions in the kidney than those in the pelvis, because in several patients the wound in the pelvis was but lightly sutured in anticipation of future need of external drainage, whereas the wound in the kidney was always thoroughly closed by suture. It is my impression, however, that there is less danger of leakage when the stone is extracted through the parenchyma of the kidney.

In the majority of patients with nephritic calculi either the pyelitis is so severe or the kidney itself is in such a state of advanced pyonephrosis that all question of closure of the kidney is at once settled. External drainage is necessary. There are, on the other hand, patients in whom the kidney itself appears comparatively normal and where the pyelitis is comparatively slight. Drainage seems, under such conditions, to be quite unnecessary. We will always, however, encounter a few cases where it will not be easy to decide whether or not to employ drainage. In all cases we must be sure that the ureter is patent. Drainage is indicated if there be any sign of disorganization of the kidney itself, if the calyces be much distended, if the urine should have been loaded with pus prior to the operation, if there should have been at any time fever or signs of sepsis, if much damage has been done to the kidney during the extraction of the calculus, and if there should have been crumbling of the calculus during the process of its extraction,—as under these circumstances some small fragments might have been left behind in the calyces. Should there be doubt as to the wisest method of procedure, a compromise may be made and the kidney very lightly sutured with fine (oo) catgut. Should the inflammation of the pelvis be so severe as to demand drainage, nature will come to its relief and burst open the sutured kidney, as occurred in one of my cases.